Amendments to the Claims:

Please amend Claims 1, 6, 8, 11, 16, 18, 21, 26, 28, 31, 36, 38, 41, 46, 48, and 51-53.
The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing:

1.   (Currently amended) A method for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:

causing the client to send a test message ~~via a network element to a~~ destined for a test URL to a network element, the test URL including a host name not known to the client or network element but for which a test server is known to be authoritative, the network element responsively accessing the test server; and

at the test server, recognizing the host name of the test URL in a request from the network element to resolve the host name in the test URL to an IP address and registering the address of the network element making the request.

2.   (Original) The method according to Claim 1 wherein registering comprises logging the network element IP address.

3.   (Original) The method according to Claim 1 wherein the test message includes a code in the host name of the test URL to identify the test message to the server.

4.   (Previously Presented) The method according to Claim 1 further comprising, at the test server, (i) handing back a test IP address for the client and (ii) recording an IP address of the client when the client subsequently sends a message directly to the test IP address.

5.   (Original) The method according to Claim 4 wherein the test message comprises a code in the host name of the test URL to identify the test message to the server.

6.   (Currently amended) The method according to Claim 1 wherein the client is caused to send the test message in response to a non-test server ~~to forward~~ sending a redirect test

message ~~from the non-test server~~ to the client, the redirect test message redirecting the client to the test URL.

7. (Previously Presented) The method according to Claim 6 wherein the redirect test message comprises the client IP address in the host name of the redirect test message.

8. (Currently amended) The method according to Claim 7 further comprising causing the client to send a preliminary test message <u>to the non-test server</u> which results in the <u>non-test server sending the</u> redirect test message<u>, wherein the redirect test message includes</u> ~~with~~ the client IP address from the preliminary test message.

9. (Original) The method according to Claim 7 further comprising encoding the client IP address in the host name of the test URL.

10. (Original) The method according to Claim 1 wherein the test URL is unique.

11. (Currently amended) A system for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:

    a client caused to send a message ~~via a network element to a~~ <u>destined for a test URL to a network element,</u> the test URL including a host name not known to the client or network element<u>, the network element responsively accessing the authoritative server</u>; and

    a server that (i) is ~~an~~ <u>the</u> authoritative server for the host name in the test URL, (ii) recognizes the host name of the test URL in a request from the network element to resolve the host name of the test URL to a test IP address, and (iii) identifies the address of the network element making the request.

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12. (Original) The system according to Claim 11 wherein the server comprises a log for storing the network element IP address.

13. (Original) The method according to Claim 11 wherein the test message includes a code in the host name of the test URL to identify the test message to the server.

14. (Previously Presented) The system according to Claim 11 wherein the server (i) hands back the test IP address for the client and (ii) records an IP address of the client when the client subsequently sends a message directly to the test IP address.

15. (Original) The system according to Claim 14 wherein the test message comprises a code in the host name of the test URL to identify the test message to the server.

16. (Currently amended) The system according to Claim 11 wherein the client is caused to send the test message in response to the client causing a non-test server to forward sending a redirect test message from the non-test server to the client, the redirect test message redirecting the client to the test URL.

17. (Previously Presented) The system according to Claim 16 wherein the redirect test message comprises the client IP address in the host name of the redirect test message.

18. (Currently amended) The system according to Claim 17 wherein the client sends a preliminary test message to the non-test server which results in the non-test server sending the redirect test message, wherein the redirect test message includes with the client IP address from the preliminary test message.

19. (Original) The system according to Claim17 further comprising encoding the client IP address in the host name of the test URL.

20. (Original) The system according to Claim 11 wherein the test URL is unique.

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21. (Currently amended) An apparatus for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:

an interface coupled to a network to receive client messages; and

a processor coupled to the interface, the processor executing a set of computer program instructions, the computer program instructions:

receiving a request from a network element in response to the network element receiving a test message destined for a test URL from a client ~~via a network element to a~~, the test URL including a host name not known to the client or network element but for which the apparatus is known to be authoritative; and

recognizing the test URL in ~~a~~ the request from the network element to resolve the host name to an IP address and registering the network element making the request.

22. (Original) The apparatus according to Claim 21 further comprising memory coupled to the processor for the processor to log the network element IP address.

23. (Original) The apparatus according to Claim 21 wherein the test message includes a code in the host name of the test URL to identify the test message to the server.

24. (Previously Presented) The apparatus according to Claim 21 wherein the executable instructions further include instructions to (i) hand back a test IP address for the client and (ii) record an IP address of the client when the client subsequently sends a message directly to the test IP address.

25. (Original) The apparatus according to Claim 24 wherein the test message comprises a code in the host name of the test URL to identify the test message to the server.

26. (Currently amended) The apparatus according to Claim 21 wherein the instructions further comprise instructions to cause the client to send the test message in response to ~~the client causing~~ a non-test server ~~to forward~~ sending a redirect test message ~~from the~~

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non-test server to the client, the redirect test message redirecting the client to the test URL.

27.   (Previously Presented) The apparatus according to Claim 26 wherein the redirect test message comprises the client IP address in the host name of the redirect test message.

28.   (Currently amended) The apparatus according to Claim 27 wherein the instructions further comprise instructions to cause the client to send a preliminary test message to the non-test server which results in the non-test server sending the redirect test message, wherein the redirect test message includes with the client IP address from the preliminary test message.

29.   (Original) The apparatus according to Claim 27 further comprising instructions to decode the client IP address from the host name of the test URL.

30.   (Original) The apparatus according to Claim 21 wherein the test URL is unique.

31.   (Currently amended) In a server, a method for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:
        receiving a request from a network element in response to the network element receiving a message destined for a test URL from a client via a network element to a , the test URL including a host name not known to the client or network element but for which the server is known to be authoritative; and
        recognizing the host name in the test URL in a the request from the network element to resolve the host name to an IP address and registering the address of the network element making the request.

32.   (Original) The method according to Claim 31 further comprising logging the network element IP address.

33.   (Original) The method according to Claim 31 wherein the test message includes a code in a host name of the test URL to identify the test message to the server.

34.   (Previously Presented) The method according to Claim 31 further including, at the server, (i) handing back a test IP address for the client and (ii) recording an IP address of the client when the client subsequently sends a message directly to the test IP address.

35.   (Original) The method according to Claim 34 wherein the test message comprises a code in the host name of the test URL to identify the test message to the server.

36.   (Currently amended) The method according to Claim 31 further comprising causing the client to send the test message in response to ~~the client causing~~ a non-test server ~~to forward~~ sending a redirect test message ~~from the non-test server~~ to the client, the redirect test message redirecting the client to the test URL.

37.   (Previously Presented) The method according to Claim 36 wherein the redirect test message comprises the client IP address in the host name of the redirect test message.

38.   (Currently amended) The method according to Claim 37 further comprising causing the client to send a preliminary test message to the non-test server which results in the non-test server sending the redirect test message, wherein the redirect test message includes ~~with~~ the client IP address from the preliminary test message.

39.   (Original) The method according to Claim 37 further comprising decoding the client IP address from the host name of the test URL.

40.   (Original) The method according to Claim 31 wherein the test URL is unique.

41. (Currently amended) A computer program product comprising:

a computer usable medium for storing data; and

a set of computer program instructions embodied on the computer useable medium, including instructions to:

receive <u>a request from a network element in response to the network element receiving</u> a <u>test</u> message <u>destined for a test URL</u> from a client ~~via a network element to a~~ , <u>the</u> test URL including a host name not known to the client or network element but for which a server executing the computer program instructions is known to be authoritative; and

recognize the host name in the test URL in ~~a~~ <u>the</u> request from the network element to resolve the host name to an IP address and register the address of the network element making the request.

42. (Original) The computer program product according to Claim 41 further comprising instructions to log the network element IP address.

43. (Original) The computer program product according to Claim 41 wherein the test message comprises a code in the host name of the URL to identify the test message to the server.

44. (Previously Presented) The computer program product according to Claim 41 further comprising instructions to (i) hand back a test IP address for the client and (ii) ~~recording~~ record an IP address of the client when the client subsequently sends a message directly to the test IP address.

45. (Original) The computer program product according to Claim ~~45~~ 44 wherein the test message comprises a code in the host name of the test URL to identify the test message to the server.

46. (Currently amended) The computer program product according to Claim 41 wherein the instructions further comprise instructions to cause the client to send the test message in response to ~~the client causing~~ a non-test server ~~to forward~~ sending a redirect test message ~~from the non-test server~~ to the client, the redirect test message redirecting the client to the test URL.

47. (Previously Presented) The computer program product according to Claim 46 wherein the redirect test message comprises the client IP address in the host name of the redirect test message.

48. (Currently amended) The computer program product according to Claim 47 wherein the instructions further comprise instructions to cause the client to send a preliminary test message to the non-test server which results in the non-test server sending the redirect test message ~~with~~ , wherein the redirect test message includes the client IP address from the preliminary test message.

49. (Original) The computer program product according to Claim 47 further comprising instructions to decode the client IP address from the host name of the test URL.

50. (Original) The computer program product according to Claim 41 wherein the test URL is unique.

51. (Currently amended) A method for assisting to identify an address of a network element that a particular client uses to obtain IP addresses, comprising:

receiving a message from a client;

parsing the message for an IP address of the client and encoding the client IP address into a host name for a test URL, the test URL including the host name not known to the client or network element used by the client but for which a test server is authoritative; and

forwarding ~~returning~~ the test URL ~~back for~~ to the client in a redirect test message, the redirect test message causing the client to send a non-redirect test message to the network element to make a request of the test server to resolve the host name in the test URL to a test IP address.

52. (Currently amended) An apparatus for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:

   means for receiving a message from a client;

   means for parsing the message for an IP address of the client and encoding the client IP address into a host name for a test URL, the test URL including the host name not known to the client or network element used by the client but for which a test server is authoritative; and

   means for forwarding the test URL back for the client in a redirect test message, the redirect test message causing the client to send a non-redirect test message to the network element to make a request of the server to resolve the host name in the test URL to a test IP address.

53. (Currently amended) A signal for identifying an address of a network element that a particular client uses to obtain IP addresses, comprising:

   a communication signal, adapted to being passed from the client to the network element, the communication signal including a test URL comprising a unique host name to identify a test corresponding to the test URL, the test executed to resolve the host name in the test URL to an IP address of the network element.

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54. (Original) The signal according to Claim 53 wherein the host name of the test URL comprises an encoded IP address of the client.

55. (Original) The signal according to Claim 53 wherein the test URL is unique.